STATEMENT OF BASIS (AI No. 22235)

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0124648** to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Acadian Millwork & Supply, Inc.
13233 Ronald Reagan Hwy. (US Hwy. 190 W)
Covington, LA 70433

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Lisa Kemp

DATE PREPARED: September 23, 2009

1. PERMIT STATUS

A. Reason For Permit Action:

The Department of Environmental Quality proposes to revoke the previously issued Louisiana Pollutant Discharge Elimination System (LPDES) Permit No: LAG480434 and reissue an LPDES permit for a five-year term.

Energy Cranes, LLC was issued authorization under the LPDES General Permit for Light Commercial Facilities (authorization number LAG480434) on August 11, 2004 to discharge treated sanitary wastewater and industrial storm water runoff. The site was sold and LPDES Permit Authorization No. LAG480434 was modified effective April 10, 2007 to reflect an ownership change from Energy Cranes, LLC to The Mandeville Partnership – Acadian Millworks & Supply Company, Inc. (Note: Louisiana Secretary of State Corporations Database lists the name as Acadian Millwork & Supply, Inc.)

Acadian Millwork & Supply, Inc. has leased a portion of the site to Mechanical Equipment Company, Inc. (MECO). Acadian Millwork & Supply submitted an application on April 30, 2009 for a minor industrial permit to include the additional discharges of water purification equipment testwater, hydrostatic test water, water treatment wastewaters, and equipment rinsewater from the MECO operations. All discharges covered under LAG480434 will be covered under the individual permit, LA0124648. Upon issuance of LPDES individual permit LA0124648, the individual permit will replace the previously issued LPDES permit LAG480434.

B. LPDES permits – LAG480434
LPDES permit effective date: August 11, 2004
LPDES permit expiration date: July 31, 2006
(administratively extended – the current LAG480000 permit has been stayed by court order)

Modified LPDES permit effective date: April 10, 2007

C. Date Application Received: April 30, 2009; additional information received on August 25, 2009 and August 26, 2009.

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - The site is composed of two operators – a millworks facility manufacturing doors,window frames, and moldings (Acadian Millwork & Supply) and a fabricator of water purification units (MECO).

Acadian Mills operates a wood millwork to assemble doors, window frames, and moldings. All operational activities occur inside a large manufacturing building. No floor drains are located inside the building and no process water is produced. Wood shavings are the main byproduct and are sold to a local horse shavings supplier. Other waste material may be unusable wood and broken window pieces, which are disposed of in a dumpster.

The MECO Covington facility manufactures complete water purification units, and water purification unit components for biopharmaceutical, marine, and military customers. The equipment purifies water to distilled water suitable for medical use. Complete water purification units, water purification unit components for another MECO manufacturing facility located in Texas, and water purification unit parts and components for support of customer's units in the field are produced at this facility.

Manufacturing processes at the MECO Covington facility include machining, fabrication, assembly, cleaning, and testing. The facility is located on approximately 5.7 acres and employs 97 people.

Compressor Manufacture and Repair

Many MECO water purification units utilize compressors designed and manufactured in-house. MECO also repairs and rebuilds used compressors. After final machining, the bearing is sprayed with a primer and coating prior to being used for compressor assembly. This painting is performed in a small paint booth located adjacent to the machine shop. Compressors are tested before being shipped to the customer. Each compressor test stand contains an amount of softened well water that is recirculated in the stand to cool the steam from the compressor discharge. The small water softener automatically regenerates twice a month.

Hydrostatic Testing

Fabricated components are hydrotested to ensure there are no leaks in the heat transfer tubes and to check for structural integrity. Components are filled with softened well water and pressurized to a specific pressure. The components are maintained under pressure while an inspection is performed. Once the hydrotest is complete, the water is drained to the fire water pond. No additives are used in the hydrostatic test water.

Equipment Test Water

Completed water purification units are operationally tested after assembly is complete. Water from three wells is pumped into a well water storage tank. Small amounts of sodium hypochlorite are periodically added to the well water storage tank to prevent biological growth. Water is pumped from the tank through a water softener to remove the hardness from the well water, through a carbon filter to remove any residual sodium hypochlorite and to the unit being tested. A natural gas fired boiler provides steam for unit testing. Condensate is returned to the boiler from the unit being tested to minimize the amount of make-up water needed. Periodic boiler blowdown is routed to the hot water waste tank. Since the primary function of the units

being tested is water purification, a stream of high quality distilled water is generated. Additionally, a much smaller stream of water that is of a higher dissolved solids content than the incoming softened well water is produced. Nothing is added to the water during the test so the two existing streams are simply combined resulting in a stream of water of the same quantity and quality as the softened well water being fed to the unit. The combined exiting streams from the unit test are at a higher temperature than the well so an additional stream of cool un-softened well water is introduced to the stream exiting the unit to reduce the temperature before discharge into the fire water pond.

Component Cleaning

The finished parts manufactured or rebuilt may be cleaned to ensure the assembled unit is free of dirt and soil. Cleaning is performed with a hot water pressure washer. If any detergent is used with this cleaning process, the parts are suspended over a catch tank. The cleaning solution is collected and pumped into the waste storage tank for removal by a waste disposal contractor. However, if detergent is not used, the water is allowed to fall onto the uncovered slab. Runoff from the slab goes to a drain pipe, where it flows into a fire water pond.

Wastewaters collected in the hot water waste tank and cool water waste tank are further processed through the Reverse Osmosis unit to filter out suspended solids. The concentrated wastewater is stored in a double-walled storage tank and disposed of by a local waste disposer. The clean water is fed back into a feed water tank. This minimizes the amount of fresh well water required for use during testing and filter washing.

Sanitary wastewater is processed through a septic treatment system and is discharged into a drainage ditch.

B. FEE RATE
1. Fee Rating Facility Type: minor
2. Complexity Type: II*
3. Wastewater Type: III
4. SIC code: 2431, 3559

* Complexity points were bpj'd to 5 based on low flow.

B. LOCATION – The street address for Acadian Millwork & Supply is 13233 Ronald Reagan Hwy. (US Hwy 190 W). The portion of the site leased to MECO has a street address of 13189 Ronald Reagan Hwy. (US Hwy 190 W).
Covington, St. Tammany Parish (Latitude 30° 29' 55", Longitude 90° 11' 40")

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: stormwater runoff and de minimus discharges of equipment testing wastewater, hydrostatic test water, water treatment wastewaters, and equipment rinsewater

Treatment: settling
The combined exiting streams from the unit test are at a higher temperature than the well, so an additional stream of cool un-softened well water is introduced to

	the stream exiting the unit to reduce the temperature before discharge into the fire water pond.
Location:	at the point of discharge from the fire water pond prior to combining with other waters
Flow:	flow is intermittent, estimated average flow – 0.02 MGD estimated flow of the wastewater from the MECO facility is 7850 gpd (water purification equipment testing – 7500 gpd; hydrostatic testing – 300 gpd; water treatment wastewaters – 10 gpd; equipment rinsewater – 40 gpd)
Discharge Route:	parish drainage ditch along US Hwy. 190; thence to Soap and Tallow Branch; (approx. 0.4 miles); thence to the Tchefuncte River (approx. 4.0 miles)

Outfall 002 (former Outfall 001 from LAG480434)

Discharge Type:	treated sanitary wastewater
Treatment:	septic system
Location:	at the point of discharge from the STP, prior to combining with other waters
Flow:	less than 5000 gpd; 130 employees @ 20 gpd/employee = 2600 gpd
Discharge Route:	parish drainage ditch along US Hwy. 190; thence to Soap and Tallow Branch (approx. 0.4 miles); thence to the Tchefuncte River (approx. 4.0 miles)

4. RECEIVING WATERS

STREAM - parish drainage ditch along US Hwy. 190; thence to Soap and Tallow Branch; thence to the Tchefuncte River

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040801

DESIGNATED USES -
a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
g. outstanding natural resources

5. TMDL STATUS

Subsegment 040801, Tchefuncte River - from headwaters to Bogue Falaya River; includes tributaries (Scenic), is listed on LDEQ's Final 2006 303(d) List as impaired for pathogen indicators (total Fecal Coliform) and Mercury. The Mercury impairment is suspected to be due to atmospheric deposition. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the fabrication of water purification units and millworks facility point source categories have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. Mercury is not expected to be in the discharges from this facility. Therefore, for the purposes of this permit, the pathogen indicators impairment will be addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Pathogen indicators

To protect against the further impairment of the pathogen indicators impairment cause, a fecal coliform limit has been placed on Outfall 002.

Outstanding Natural Resource Waters Concerns:

This is an existing facility location. The discharge of treated sanitary wastewater (Outfall 002) is an existing discharge which was originally permitted under LAG530938 (issued April 14, 1999). LAG530938 was replaced by LAG480434 (issued August 11, 2004) for the discharge of treated sanitary wastewater and industrial stormwater runoff. Compliance with the standard sanitary limits in this permit should not cause or contribute to the violation of water quality standards in the receiving stream. The firewater pond discharge (Outfall 001) consists primarily of stormwater runoff along with de minimus discharges of equipment testing wastewater, hydrostatic test water, water treatment wastewaters, and equipment rinsewater. MECO has been operating at this location since 2006 with no documented water quality problems. The discharge travels approximately 0.4 miles through a parish drainage ditch along U. S. Highway 190 to Soap and Tallow Branch, then approximately 4 miles to the Tchefuncte River. Discharges from the fire water pond should only occur during non-critical flows. The majority of the process wastewater (estimated flow is 7850 gpd) is water purification equipment testing wastewater. Nothing is added to the water during the test, resulting in a discharge of water of the same quantity and quality as the softened well water being fed to the unit. Because the discharge from the unit test is at a higher temperature than the well water, an additional stream of cool un-softened well water is introduced to the stream exiting the unit being tested to reduce the temperature before discharge into the fire water pond. If detergent is used for component cleaning, the cleaning solution is collected and pumped into the waste storage tank for removal by a waste disposal contractor. Therefore, the discharge from the fire water pond is not expected to cause or contribute to the violation of water quality standards in the receiving stream.

The MECO facility uses ion exchange to soften well water. Sodium chloride is used to regenerate the ion exchange resulting in a discharge of water treatment wastewaters to the fire water pond estimated at 10 gallons per day. Analytical results for chlorides from the applicant's Discharge Monitoring Reports (DMRs) were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards. The screen shows that water quality limits for chlorides are not required. Because the analytical data for chlorides is less than 10% of the screen results, chloride limits were not included in this permit. Calculations, results, and documentation are presented in Appendix A.

6. CHANGES FROM PREVIOUS PERMIT

Outfall 001

Outfall 001 for the discharge of stormwater runoff and de minimus discharges of equipment testing wastewater, hydrostatic test water, water treatment wastewaters, and equipment rinsewater has been established.

Outfall 002

This outfall is the former Outfall 001 from LAG480434 for the discharge of treated sanitary wastewater. It has been renumbered per applicant request.

Monthly average effluent limitations for BOD, TSS, and Fecal Coliform and monthly average flow reporting have been established at Outfall 002. Weekly average limitations are now daily maximum limitations. These changes have been made in accordance with current LDEQ guidance for similar discharges.

Monitoring frequency for Outfall 002 has been increased from 1/6 months to 1/ quarter. The estimated flow based on 130 employees is 2600 gallons per day. However, the DMR report from June, 2009 shows a monthly average flow of 6785 gallons per day. Therefore, the monitoring frequency of 1/ quarter from compliance order WE-CN-09-0103, Interim Limits and Monitoring Requirements, has been retained.

7. COMPLIANCE HISTORY/COMMENTS

A. OEC – Compliance Order WE-CN-09-0103 including interim limits and monitoring requirements was issued to the MECO facility on April 7, 2009 for discharging without a permit. MECO is leasing and operating a portion of this site. A permit application was received by this Department on April 30, 2009.

B. DMR Review/Excursions – A DMR review for LAG480434 from April, 2007 through December, 2008 revealed the following permit violations:

Date	Parameter	Outfall	Reported Value	Permit Limits
Jan – June 2007	BOD_5	001	51 mg/L	45 mg/L
July – Dec 2007	Sampling not done	001		
July – Dec 2008	TSS	001	110 mg/L	45 mg/L

DMRs submitted April, 2009 through July, 2009 for interim limits contained in WE-CN-09-103 revealed the following excursions. No sample was collected at Outfall 001 for April, 2009.

Date	Parameter	Outfall	Reported Value	Permit Limits
June, 2009	TSS	002	53 mg/L (monthly average)	30 mg/L
June, 2009	TSS	002	67 mg/L (daily max)	45 mg/L

C. Inspections – A compliance inspection performed at this facility on June 1, 2005. Energy Cranes was the permit holder for the site. The inspection report revealed that the site was to be closed on July 15, 2005 and would be sold. They planned to maintain their DEQ permits for the time being and hoped to find a buyer for the site.

8. EXISTING EFFLUENT LIMITS

LAG480434

Outfall 001 - treated sanitary wastewater

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	mg/L (unless stated)		
Flow (gpd)	---	Report	1/ 6 months
BOD_5	---	45	1/ 6 months
TSS	---	45	1/ 6 months
Fecal Coliform colonies/100ml	---	400	1/ 6 months
pH, s.u.	6.0 (min)	9.0 (max)	1/ 6 months

Industrial stormwater runoff is covered under Sector AB of the Multi-Sector General Permit.

WE-CN-09-0103 – Interim Limits and Monitoring Requirements

Outfall 001 – Unit test waters, hydrostatic test waters, equipment rinsewater, water softening wastewater, and stormwater runoff

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	mg/L (unless stated)		
Flow (gpd)	Report	Report	1/ month
Temperature °F	Report	Report	1/ month
TOC	---	50	1/ month
TSS	90	135	1/ month
Oil & Grease	---	15	1/ month
Chlorides	Report	Report	1/ month
pH, s.u.	6.0 (min)	9.0 (max)	1/ month

Outfall 002 - treated sanitary wastewater

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	mg/L (unless stated)		
Flow (gpd)	Report	Report	1/ 3 months
BOD_5	30	45	1/ 3 months
TSS	30	45	1/ 3 months
Fecal Coliform colonies/100ml	200	400	1/ 3 months
pH, s.u.	6.0 (min)	9.0 (max)	1/ 3 months

The facility is required to develop a Stormwater Pollution Prevention Plan (SWP3) for stormwater runoff.

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040801 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf sturgeon, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Gulf sturgeon. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Acadian Millwork & Supply

1. **Outfall 001** – stormwater runoff and de minimus discharges of equipment testing wastewater, hydrostatic test water, water treatment wastewaters, and equipment rinsewater

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (gpd)	Report	Report	LAC 33:IX.2707
Temperature (°F)	Report	Report	BPJ
TOC	---	50	BPJ; similar discharges*;LDEQ stormwater guidance (1)
Oil & Grease	---	15	BPJ; similar discharges*, LDEQ stormwater guidance (1)
pH, s.u.	6.0 (min)	9.0 (max)	BPJ; similar discharges *, LDEQ stormwater guidance (1)

Treatment: settling
The combined exiting streams from the unit test are at a higher temperature than the well, so an additional stream of cool un-softened well water is introduced to the stream exiting the unit to reduce the temperature before discharge into the fire water pond.

Monitoring Frequency: 1/month

Limits Justification: TOC, Oil & Grease and pH limits are BPJ, based on LDEQ stormwater guidance and similar discharges*. Temperature reporting is included to gather information on the temperature of the discharge.

Hydrostatic test wastewater is a de minimus component of this discharge. New water purification unit components are hydrotested by this facility using softened well water. Since no additives are used in the hydrostatic testing, and the softened well water is the same water which is used to test the completed units at the facility, the discharge from the hydrostatic test water should contain the same constituents as the equipment testing wastewater.

The majority of the discharge is stormwater runoff. Because the volume of discharge is too low to have significant impact, typical TSS limitations for hydrostatic test water and water treatment wastewaters have not been incorporated into the permit.

(1) LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)

2. **Outfall 002** - treated sanitary wastewater (estimated flow is 2600 gpd))

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	mg/L		
Flow (gpd)	Report	Report	
BOD_5	30	45	Similar discharges* (BPJ), LAG540000
TSS	30	45	Similar discharges* (BPJ), LAG540000
Fecal Coliform colonies/100ml	200	400	Similar discharges* (BPJ), LAG540000
pH, s.u.	6.0 (min)	9.0 (max)	Similar discharges* (BPJ), LAG540000

Treatment: septic system

Monitoring Frequency: Quarterly for all parameters at the point of discharge from the STP prior to mixing with other waters. Monitoring frequency for Outfall 002 has been increased from 1/6 months to 1/ quarter. The estimated flow based on 130 employees is 2600 gallons per day. However, the DMR report from June, 2009 shows a monthly average flow of 6785 gallons per day. Therefore, the monitoring frequency of 1/ quarter from compliance order WE-CN-09-0103, Interim Limits and Monitoring Requirements, has been retained.

Limits Justification: Limits are based on current guidance for similar discharges from other industrial facilities and the Class II Sanitary Discharge General Permit, LAG540000 effective July 1, 2008.

* Existing permits for similar outfalls

BPJ Best Professional Judgement
su Standard Units

NOTE
For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2431 and 3559 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).